

From the INTERNATIONAL BUREAU

PCTNOTIFICATION CONCERNING
TRANSMITTAL OF COPY OF INTERNATIONAL
PRELIMINARY REPORT ON PATENTABILITY
(CHAPTER I OF THE PATENT COOPERATION
TREATY)

(PCT Rule 44bis.1(c))

To:

SINGH, Tejinder
Klein, O'Neill & Singh, LLP
43 Corporate Park
Suite 204
Irvine, California 92606
ETATS-UNIS D'AMERIQUEDate of mailing (*day/month/year*)

12 April 2007 (12.04.2007)

Applicant's or agent's file reference

QN1116.PCT

IMPORTANT NOTICE

International application No.

PCT/US2005/034844

International filing date (*day/month/year*)

27 September 2005 (27.09.2005)

Priority date (*day/month/year*)

01 October 2004 (01.10.2004)

Applicant

QLOGIC CORPORATION

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

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KLEIN, O'NEILL & SINGH

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference QN1116.PCT	FOR FURTHER ACTION See item 4 below	
International application No. PCT/US2005/034844	International filing date (<i>day/month/year</i>) 27 September 2005 (27.09.2005)	Priority date (<i>day/month/year</i>) 01 October 2004 (01.10.2004)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant QLOGIC CORPORATION		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 7 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

- | | | |
|-------------------------------------|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> | Box No. I | Basis of the report |
| <input type="checkbox"/> | Box No. II | Priority |
| <input type="checkbox"/> | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> | Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> | Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> | Box No. VI | Certain documents cited |
| <input type="checkbox"/> | Box No. VII | Certain defects in the international application |
| <input type="checkbox"/> | Box No. VIII | Certain observations on the international application |

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Date of issuance of this report 03 April 2007 (03.04.2007)
	Authorized officer Yoshiko Kuwahara e-mail: pt07.pct@wipo.int

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

REC'D 13 JUN 2006

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To:

see form PCT/ISA/220

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing

(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION

See paragraph 2 below

International application No.
PCT/US2005/034844

International filing date (day/month/year)
27.09.2005

Priority date (day/month/year)
01.10.2004

International Patent Classification (IPC) or both national classification and IPC
INV. G06F3/06

Applicant
QLOGIC CORPORATION

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



European Patent Office - P.B. 5818 Patentlaan 2
NL-2280 HV Rijswijk - Pays Bas
Tel. +31 70 340 - 2040 Tx: 31 651 epo nl
Fax: +31 70 340 - 2016

Date of completion of
this opinion

See form
PCT/ISA/210

Authorized Officer

Alliot, S

Telephone No. +31 70 340-9462



**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/US2005/034844

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of:
 - ☒ the international application in the language in which it was filed
 - ☐ a translation of the international application into , which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1 (b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ on paper
 - ☐ in electronic form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in electronic form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/US2005/034844

Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-28
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-28
Industrial applicability (IA)	Yes: Claims	1-28
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item V

**Reasoned statement with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

1. Reference is made to the following documents:

D1: NAIK D.: "Inside Windows Storage: Server Storage Technologies for Windows 2000, Windows Server 2003 and Beyond" 15 July 2003 (2003-07-15), ADDISON-WESLEY,, US, PAGE(S) 137-173
D2: US 2003/002503 A1 (BREWER LANI WILLIAM ET AL) 2 January 2003 (2003-01-02)
D3: US 2001/047460 A1 (KOBAYASHI NAOTAKA ET AL) 29 November 2001 (2001-11-29)
D4: PATHLIGHT: "Deliver server-free backup" April 2000 (2000-04), PATHLIGHT TECHNOLOGY, INC, PAGE(S) 1-8

2. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of independent claim 1 does not involve an inventive step in the sense of Article 33(3) PCT.

The document D2 discloses (the references in parentheses applying to this document):

A method for performing a copy operation between storage devices coupled to a Fibre Channel switch (see from par [0040] to par [0042] and par [0085]), comprising: initiating a write operation with a destination target storage device (par [0045], Fig 4A), wherein the Fibre Channel switch (p 3, l 44-50) initiates the write operation (par [0150], step 4) and sets a source address of a source storage device from where data is to be copied (par [0154], step 6); receiving a response from the destination storage device wherein the response includes a D_ID for the source storage device (par [0152], step 5); routing the response from the destination storage device to a switch processor (par [0154], step 6); initiating a read command with the source storage device (par [0158], step 7); and

substituting a RX_ID in the response received from the destination storage device (par [0154], step 6) so that the source storage device receives an expected RX_ID (from par [0160] to par [0164]).

D2 does not explicitly disclose a copy operation between storage devices however it discloses a data transfer operation between a source (that implicitly includes a device for the data storage) and a storage destination (par [0040], par [0141]), such data transfer includes copy operations. Thus the teaching of D2 would be applied by the person skilled in the art without inventive step for a copy operation between storage devices.

In D2 a read command is not disclosed however in D2, the command (see the "redirected transfer read frame" par [154]) initiates a read (par [0158], step 7).

Therefore claim 1 is not considered inventive.

3. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of independent claim 8 does not involve an inventive step in the sense of Article 33(3) PCT.

The document D1 discloses (the references in parentheses applying to this document):

A method for performing a copy operation between storage devices (p 152, l 28-30) coupled to a Fibre Channel switch (p 154, l 14-19), comprising:
receiving a user command to copy data from a source storage device to a destination storage device (p 155, l 9-12, Fig 5.6, ref 2), wherein the Fibre Channel switch receives the user command and controls the copying operation such that the Fibre Channel switch appears to the source storage device (p 153, l 18 to p 154, l 5) as the destination storage device, and to the destination storage device (p 154, l 6-7) the Fibre Channel switch appears to be the source storage device (Fig 5.6, ref 3).

Document D1 differs from claim 8 in that the method is implemented with a router instead of a switch. Switches are faster than routers and were readily available for

implementing a method for performing a copy operation between storage devices coupled to a Fibre Channel switch at the date of priority of the application e.g. D4 (see p 7, left col, l 12 to p 7, right col, l 30 and Fig 7). As indicated in D1, the person skilled in the art would implement the method with a fibre channel switch (p 154, l 14-19) in order to increase the speed of a copy without inventive skills.

Thus claim 8 is considered non inventive.

4. The same reasoning as for claim 8 applies, mutatis mutandis, to the subject-matter of the corresponding independent claims 15 and 22. The additional features of claim 15 and 22 are also present in D1, a storage area network, a host system and a plurality of storage devices coupled to each other (p 154, l 14-19 and Fig 5.6).

Therefore independent claims 15 and 22 are also considered not inventive.

5. Dependent claims 2-7, 9-14, 16-21, 23-28 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step, see documents D1, D2, D3 and the corresponding passages cited in the search report.